

Noise

Draft Environmental Impact Statement | 3.3

Federal law requires government agencies to promote an environment free from noise or unwanted sound that could jeopardize public health or welfare. Numerous studies have indicated that the most common sources of noise in our environment today are those associated with transportation, particularly highway traffic. As a result, noise impacts were evaluated within about 500 feet of proposed alternatives for the Mountain View Corridor (MVC).

Noise in the MVC

The MVC study area includes undeveloped, residential, recreational, and commercial land, and noise levels were measured in a variety of these areas where people could be exposed to traffic noise for extended periods of time. Current noise levels were typical of suburban environments, with higher levels measured at locations adjacent to busy roads.

To measure future noise levels near the MVC, the project team focused their analysis on areas with substantial residential developments where noise-reduction measures might make sense. Noise is measured using a decibel (dB) scale to define sound level. The Federal Highway and Federal Transit administrations have set standards at specific decibels to define sound levels for highway and transit systems that would not significantly impact surrounding residents. Projections showed that each alternative would have areas where noise levels would not meet federal standards. Numbers of residences that would have noise levels surpassing federal guidelines due to the new transportation system are shown in the accompanying table. In addition, the Mixed-Traffic Transit Option in Salt Lake County would have less effect on noise than the Dedicated Right-of-Way Transit Option, although neither would have significant impacts.

Noise Reduction

Noise barriers are solid obstructions built between the highway and the homes along a highway and can reduce the loudness, or decibels, of traffic noise by as much as half. Although they do not completely block all traffic noise, they do substantially reduce noise levels for people living next to highways. For example, a barrier could reduce the sound level of a typical tractor trailer pass-by to that of an automobile.

Twenty-three potential noise barrier locations were considered for the MVC in areas where significant noise impacts were identified. These barriers were evaluated using the Utah Department of Transportation (UDOT) guidelines for feasibility, reasonableness, and cost effectiveness. More than half of the noise barriers ultimately met UDOT's guidelines.

UDOT works closely with local residents to gauge their desire to have noise barriers built. Residents are surveyed to confirm their desire for noise walls prior to implementation. At least 75% of affected residents must express their approval of the noise walls in order for them to be installed. This polling takes place after the Record of Decision has been issued and funding has been identified.

FAOs

How effective are noise barriers?

The effectiveness of noise barriers is generally limited to areas within about 500 feet of a transportation facility. Beyond this distance, noise barriers do not effectively reduce noise levels. The most effective noise barriers are within 61 meters (200 feet) of a highway, usually the first row of homes.

When will noise barrier locations be decided?

The Draft EIS identifies areas where noise barriers could successfully reduce noise levels. However, noise barriers are not installed unless 75 percent of the affected area expresses desire for noise barriers. This polling will take place after the Record of Decision is completed in 2008.

Residences with noise levels surpassing federal guidelines:

| 5800 West Freeway Alternative | 446 |
|--------------------------------|-----|
| 7200 West Freeway Alternative | 739 |
| Southern Freeway Alternative | 140 |
| 2100 North Freeway Alternative | 134 |
| Arterials Alternative | 226 |

Public Hearings

Wednesday, November 14 Hunter High School West Valley City: 4 - 8 p.m.

Thursday, November 15 Willow Creek Middle School Lehi: 4 - 8 p.m.

Saturday, November 17 Copper Hills High School West Jordan: 2 - 6 p.m.

Please see Chapter 13 of the Draft EIS for more detailed information.